ADDITIONS TO THE BRITISH MICROLEPIDOPTERA

DAVID AGASSIZ

The Glebe House, Brewer's End, Takeley, Bishop's Stortford CM22 6QH.

Ford (1949) reviewed the microlepidoptera added to the British list since Meyrick (1928). In turn Ellerton (1970) in his 1969 Presidential Address reviewed those added since Ford. I have found these articles very useful and since an equivalent interval has passed it seemed worthwhile to compile a further such list. The form follows its predecessors, but my task has been made easier by the amount of detail given in recent reference books, such as Heath (1976), Heath & Emmet (1985), Goater (1986) and Emmet (1989a). Ellerton remarked that Ford had to consider 69 species from the 20 years covered whilst he had 109 to treat from the next 22 years, however these figures are not very meaningful. In some cases the status of a species is changed, or is uncertain, and there are also many species synonymized or for some other reason deleted from our list. According to my reckoning, the additions can be classified as follows:

	1928-47	1948-69	1970-91
(a) Newly recognized residents	40	52	55 (+2 CI)
(b) Newly established residents	8	8	12
(c) Casuals and new migrants	12	24	35

Category a includes both newly discovered species and those separated from close relatives and newly recognized; in either case they are thought to have been residents of long standing. Changes of status are omitted from these figures. The totals are approximate since one can not always be sure whether or not a species is established as resident or not, nor whether it was before it came to our attention.

Whilst there are bound to be more resident species undetected or hidden within close relatives, one cannot expect the numbers in category a to be sustained, now that most groups have been examined critically. Those in category b are likely to continue or even increase, and the ever increasing volume of trade and travel is likely to cause category c to continue to grow. It is of interest, though, to note that in 1991 no additions have been announced in any category—the first time for many years, if ever. That could become less rare, and the two or three additions per year we have come to expect may decline.

Species are considered in systematic order according to Bradley & Fletcher (1986).

Bohemannia auriciliella (de Joannis) = bradfordi (Emmet)

This species was discovered at East Blean, Kent 7.vii.1973 (Emmet, 1974a). Only one other specimen is known, from Southamptom bred 11.vii.1937, plus two from the Continent. The fullest description is given by Johansson *et al.* (1990).

Ectoedemia spinosella (de Joannis)

Discovered by Emmet in 1969 (Emmet, 1970a) this species is resident and found locally in south-eastern coastal counties.

E. erythrogenella (de Joannis)

Found by A. M. Emmet and S. C. S. Brown in 1973 (Emmet, 1974b) this species is found along the coast of south-east England.

E. heringi (Toll) = *quercifoliae* (Toll)

Distinguished from E. subbimaculella (Haw) in 1971 Proc. Trans. Br. Ent. Nat. Hist. Soc. 5: 132, this species is widely distributed in Britain and common in the south-east.

Trifurcula squamatella (Staint.)

Reinstated to the British list when separated from *T. immundella* (Zell.) by van Nieukerken (1987). Old records from London, Southampton and possibly Bristol.

Stigmella ulmariae (Wocke)

Reinstated to the British list by Emmet (1970b) this is a local species in southern England and Scotland.

[S. auritella (Skåla)]

This species was separated from *S. salicis* (Staint.) as described by Emmet (1976) but has since been relegated once again to synonymy with that species—see Johansson *et al.* (1990).

S. zelleriella Snell.) = repentiella (Wolff)

A specimen bred from the east coast of Kent by S. Wakely was identified as this species by Emmet (1977a) who confirmed that it is still resident but very local.

S. carpinella (Hein.)

Discovered in Sussex and Kent by Emmet (1977b) and possibly earlier by W. H. B. Fletcher.

S. roborella (Staint.)

Separated from *S. ruficapitella* (Haw.) by Johansson (1971) and recognized as British in Emmet (1974c).

S. svenssoni (Johansson)

Separated from *S. ruficapitella* (Haw.) by Johansson (1971) and recognized as British in Emmet (1974c).

S. mespilicola (Frey)

Included in Emmet (1989a) and referred to in Johansson et al. (1990)

Tischeria heinemanni Wocke

Discovered at two localities in Kent by N. F. Heal in August 1984 where it appears to be resident, see *Proc. Trans. Br. Ent. Nat. Hist. Soc.* 19: 67.

Lampronia flavimitrella (Hübn.)

First found in Hampshire by Ffennell (1977) this species has since been seen in Kent. *Nematopogon magna* (Zell.) = *variella* (Brandt)

Distinguished from N. pilella (D. & S.) by Bland (1984), this species is known from the Highlands of Scotland, Ireland and Yorkshire.

Adela violella (D. & S.)

Known to Luff in the last century as a resident of Guernsey this species has been taken there in 1989 by T. N. D. Peet, so it is presumably still locally resident.

Homosetia sp.

A specimen taken in his church in Grays, Essex by Agassiz belongs to this American genus. D. R. Davies cannot place it definitely in a named species although identical specimens are known from the USA where members of the group are seldom seen.

[Cephitinea colongella (Zag.)]

The holotype of this species is labelled 'Anglia' but this is thought to be probably an error.

Nemapogon inconditella (Lucas) = heydeni Petersen

The only specimen was taken by E. C. Pelham-Clinton (1982) on a field meeting of the British Entomological and Natural History Society at Torquay, Devon on 7.vii.1979. Despite this it is likely to be resident.

Trichophaga mormopis Meyr.

Robinson (1978) added this tropical importation to the British list, but a series was later found in the L. T. Ford collection from the Isle of Wight, 1930.

Tinea fictrix Meyr.

An imported species added to the British list by Robinson (1978).

T. murariella Staint.

Another species imported with animal products described by Robinson (1979).

Ceratophaga orientalis (Staint.)

An imported species added to the British list by Robinson (1978).

C. haidarabadi Zag.

An imported species added to the British list by Robinson (1978)

Caloptilia rufipennella (Hübn.)

First noted by Emmet in 1970 in Cambridgeshire (Emmet, 1971) this species has spread rapidly northwards and more recently southwards along the east coast. It has penetrated inland, even as far as north Wales and western Scotland.

C. robustella Jäckh

Separated from *C. alchimiella* (Scop.) in 1971 this species was immediately found in British collections, (Emmet, 1973). It is widespread in Britain and common in much of England.

Parornix carpinella (Frey)

Recently distinguished from *P. fagivora* (Frey) and found to be scarce and local in south-east England. See Emmet (1986).

Callisto coffeella (Zett.)

Found in Aberdeenshire by R. M. Palmer on 18.vi.1983, it may well be resident (Palmer, Pelham-Clinton & Young, 1984).

Phyllonorycter platani (Staud.)

A mine was found by Emmet in Imperial College, South Kensington on 27.x.1990 (Emmet, 1991). The species has since been found as far as Harrow, Middx.; Esher and Weybridge, Surrey; Beckenham, Kent and Ascot, Berks.

P. leucographella (Zell.)

First noticed by a gardener at Wickford, Essex (Emmet, 1989b) this species which was probably imported by the garden centre trade has spread quickly in the home counties and has been recorded from Derby and Nottingham.

P. staintoniella (Nic.)

Heckford (1984) found this species in Cornwall in July 1983 where the species is resident in a restricted area.

P. sagitella (Bjerk.)

First bred in 1955 this species was not recognized until rather later (Price, 1977). It is presumably resident at low density, but very rare and local in the west of England and Wales. There are specimens from the 1850s in the Worcester Museum.

Phyllocnistis xenia Hering

Pelham-Clinton (1976) discovered this species near Dover in 1974 whence it has spread northwards in east Kent.

Tebenna micalis (Mann)

Heckford (1990) has shown that most, if not all, specimens of *T. bjerkandrella* (Thunb.) refer to this migratory species.

Tinagma balteolella (Fisch. v. Rösl.)

This species was found in east Kent by Agassiz and Watkinson in June 1975 (Agassiz, 1976) where it was found to be resident. It has since spread to the Dungeness area.

Argyresthia trifasciata Staud.

A single specimen of this moth was taken at Hampstead by R. A. Softly on 3.vi.1982 (Emmet, 1982). It has now become very common in parts of Holland, probably imported by the garden centre trade, and it will be surprising if it does not recur in Britain.

Swammerdamia passerella Zett.

Reinstated to the British list by Agassiz (1981a) when the species was found to be breeding in its original haunts in the Highlands of Scotland.

Plutella haasi Staud.

A single specimen taken by Canon Hervey in the western Highlands of Scotland on 5.vii.1957, only identified later by Kyrki & Jalava (1983). Despite searches no more have been found, but residence still seems more likely than migration.

Coleophora prunifoliae Doets

Distinguished from *C. spinella* Schr. (*cerasivorella* Packard) and *C. coracipennella* (Hübn.) by Heckford (1980) this species is found to be widespread in the south of England.

C. adiectella Herr.-Schäff.

Larvae collected in 1967 yielded moths later separated from *C. badiipennella* (Dup.)—Emmet (1980). A local species in the south-east.

C. hydrolapathella Hering

Taken in 1975 at Hickling Broad, Norfolk by Peet (1978) where the species is well established. It has recently been recorded from County Durham.

C. frischella (L.)

After some confusion in the nomenclature the genuine *C. frischella* was detected by Ffennell (1976). The species seems to be quite widespread in the south.

C. fuscicornis Zell.

Found in Essex in May 1973 by Emmet & Uffen (1975) where it is locally established. Apart from one other site not far away this remains the only place the species has been found.

C. linosyridella Fuchs

Bred in 1979 by Norman Heal who found larvae at Leysdown-on-Sea, Kent. It has been found in other places along the Thames estuary (Heal & Uffen, 1981).

C. gardesanella Toll = machinella Bradley

Reinstated as a British species by Bradley (1971) when it was distinguished from C. trochilella (Dup.). It is now found in a variety of localities in the south of England.

C. aestuariella Bradley

First bred by Norman Heal from the Thames estuary in 1982 this was eventually found to be an undescribed species. It is found on the salt marshes of Kent and Essex (Bradley, 1984).

Elachista eskoi Kyrki & Karnomen

Pelham-Clinton (1988a) describes how he took this species in Scotland in 1956 and had recognized it as probably new to science. It was eventually described by Finnish entomologists who found it in Finland. It is very local in Scotland.

E. orstadii Palm

Taken in Scotland in 1955, 1967 and 1978 in Berwickshire and Perthshire by Pelham-Clinton (1986).

E. pomerana Frey

Although recent records from Scotland (E. C. Pelham-Clinton pers. comm.) were quoted in Traugott-Olsen & Nielsen (1977), records from Pelham-Clinton's diaries are only from East Anglia.

E. collitella (Dup.)

Restored to the British list by Heckford (1986c), the species seems to be very local, mainly in the south-west.

E. triseriatella Staint.

Separated from *E. dispunctella* (Dup.) by Svensson (1966) the differences are described by Traugott-Olsen & Nielsen (1977). In England *E. dispunctella* tends to have a more westerly distribution.

E. littoricola Le Marchand

Discovered in 1982 by Wild (1983) this species has been found to be locally common in a few coastal localities in Hampshire.

E. cingillella (Herr.-Schäff.)

A little-known species reinstated to the British list by Bradley (1963), strangely not referred to by Ellerton (1969) who mentions other species from the same paper. Confirmed records from Lancashire and Herefordshire.

Denisia albimaculea (Haw.)

Reinstated to the British list when distinguished from *D. augustella* (Hübn.). Most British specimens are referrable to *albimaculea*. Both species are correctly illustrated by Wood (1854) Plate 40.

Bisigna procerella (D. & S.)

Found in Kent by both Chalmers-Hunt & Agassiz (1976) where the species is now locally established.

Batia internella Jäckh

First found in August 1985 by Harper (1990a) and again in 1988 this species has only been found in one place in Herefordshire where it seems to be resident. On the continent it was separated from *B. lambdella* (Don.) & *B. lunaris* (Haw.) in 1972.

Pleurota aristella (L.)

Of the doubtful old records one or two may be genuine, but this species has been found to be resident in Jersey (Harper, 1990b).

Agonopterix kuznetzovi Lvovsky

The first specimen of this species was taken by Pelham-Clinton in 1949, another with Langmaid in 1981. Then in 1982 they bred a series of the species new to science. Unfortunately they were persuaded to wait until it was described from the Soviet Union. It is local in Cornwall (Langmaid & Pelham-Clinton, 1984).

A. bipunctosa (Curt.)

Reinstated to the British list from the synonymy of A. kaekeritziana (L.) in Kloet & Hincks (1972), now that its life history is known (see Emmet, 1989a) the species is found widely in the south.

A. scopariella (Hein.)

Reinstated to the British list from the synonymy of A. atomella (D. & S.) in Kloet & Hincks (1972). It is a widespread and often common species, see Langmaid (1979).

Metzneria aprilella (Herr.-Schäff.)

Specimens of this species were at first misidentified as M. neuropterella (Zell.) until distinguished by Sattler (1981a). It is widespread in the south.

Eulamprotes phaeella Heckford & Langmaid

Described as new to science by Heckford & Langmaid (1988) the species had formerly been confused with *E. atrella* (D. & S.) and *A. anthyllidella* (Hübn.). It has been found in widely scattered localities in the British Isles.

Monochroa niphognatha (Gozmány)

Known only from one Kentish locality where it was found by Chalmers-Hunt (1985), its status cannot yet be assessed for sure.

M. moyses Uffen

Described new to science by Uffen (1991) this species is found to be well established on coastal marshes in south-east England.

Athrips rancidella (Herr.-Schäff.)

Found by Chalmers-Hunt (1985) in his garden in Kent where it had been resident for some years, this species has not been found elsewhere. It may yet fail to sustain this population.

Teleiodes wagae (Nowicki)

The first specimens of this species were bred from the Burren, County Clare by J. D. Bradley from larvae collected in 1975 but it was published by Sattler (1980). In England it has been recorded from Kent, Hampshire and Yorkshire.

Neofriseria peliella (Treits.)

This species and *N. singula* (Staud.) [=suppeliella (Wals.)] had been synonymized by Meyrick (1928) despite their separation by Walsingham (1896). The differences in wing marking are illustrated by Sattler (1959). *N. peliella* seems to be confined to the coast whereas singula is local in a few places not far from London.

Gelechia sabinella Zell.

A species possibly imported with juniper bushes first taken in north London 1971 by Agassiz (1978a), subsequently found in Worcestershire.

G. senticetella Staud.

A south European species also possibly imported with juniper bushes, just one specimen found by Agassiz (1989).

Scrobipalpa stangei (Hering)

Although taken in the Isle of Wight in 1882, attempts to rediscover this species in Britain have so far failed.

S. pauperella (Hein.) = klimeschi Povolný

Only known from Chippenham Fen were it was taken in 1972–73 by Agassiz (1986). The species has been reviewed by Sattler (1989).

Scrobipalpula tussilaginis (Frey)

Discovered by Pelham-Clinton (1989) this species is found locally on the coast of Hampshire, Dorset and south Devon.

Syncopacma suecicella (Wolff)

Found in 1984 in Cornwall by Heckford (1986a) this species is of very restricted distribution on account of the scarcity of *Genista pilosa*. Coloured illustration in *Proc. Br. Ent. Nat. Hist. Soc.* 1987; **20**: Plate IV.

Oegoconia caradjai Popescu-Gorg & Căpușe

Distinguished from its sister species O. quadripuncta (Haw.) and O. deauratella (Herr.-Schäff) by Agassiz (1982) this species is found from Kent to Cornwall in separated areas.

Scythris potentillea (Zell.)

Roche (1978) first found this species in the Breckland area of Suffolk on 30.vi.1975, it has since been found on the Suffolk coast, but attempts to find the larvae in Britain so far have failed.

S. inspersella (Hübn.)

Discovered in Norfolk both by Sattler (1981b) and John Fenn, this species is locally established, but as yet there is no evidence of its expected spread.

S. sinensis (Feld. & Rogenh.)

Two specimens taken indoors in Kent in 1980 by Foster (1984) are not enough evidence of establishment, however the species could recur.

Archips argyrospila (Walker)

An American species of which one specimen was found in a Derbyshire shop by Sterling & Sterling (1985).

A. semiferanus (Walker)

Larvae and pupae imported from America, this species was found by Lowe (1985).

Adoxophyes privatana (Walker) group

A specimen of this group was bred by Heckford (1986b) from orchids imported from south-east Asia.

Celypha rurestrana (Dup.)

Distinguished from *Olethreutes lacunana* (D. & S.) by Heckford (1988) several specimens have been detected in collections, mostly from the south-west and south Wales. A coloured illustration of the adult is shown in *Proc. Trans. Br. Ent. Nat. Hist. Soc.* 1987; **20**: Plate IV.

Lobesia botrana (D. & S.)

This mediterranean pest of grapes was first taken by Agassiz (1977) in north London. There have been subsequent records in the wild from Bedfordshire, Oxfordshire and Hampshire, but there is not yet any evidence of its breeding in Britain.

Eucosma metzneriana (Treits.)

First taken in Cambridge by Revell (1977) further specimens have been taken in Hampshire and Sussex. This rather suggests migrant origin.

Pammene luedersiana (Sorhagen)

Youden (1974) added this to the British list after finding a specimen taken by D. G. Marsh in 1964. It has since been found to be locally established in the Scottish Highlands.

P. ignorata Kuznetsov

Pelham-Clinton (1988b) took a single specimen in Devon, its status is uncertain.

P. suspectana L. & Z.

First taken by Alford (1976) this species has now been recorded from several counties in the south of England.

Cydia medicaginis (Zell.)

Formerly confused with *Collicularia microgrammana* (Guen.) this species was recognized by Karsholt. It is resident in south Essex and there is a record from Southampton, probably awaiting discovery elsewhere, see Agassiz & Karsholt (1989).

C. saltitans (Westw.)

Regularly imported from Mexico in 'jumping beans' a specimen of this species was taken in the wild by Langmaid (1991).

C. amplana (Hübn.)

Taken in Devon in 1990 by Heckford (1991). There was previously only one unconfirmed record for 1831. The species is illustrated in *Br. J. Ent. Nat. Hist.* 1991; 4: Plate II.

C. illutana (Herr.-Schäff.)

First taken by Brian Baker in 1984 this species has since been established as resident in Hampshire and Berkshire, see Bradley (1985).

Elophila difflualis (Snellen) = *enixalis* (Swinhoe)

First noted by Agassiz (1978b) this is the most frequently imported far eastern species which gets established in heated glasshouses where aquatic plants are grown.

E. melangynalis (Agassiz)

A less common asiatic species described by Agassiz (1978b) which could be imported with aquatic plants, but is much less likely to be encountered.

E. manilensis (Hamps.)

Another far eastern aquatic species separated from the above two by Agassiz (1981b) which is likely to recur and occasionally become established in heated glasshouses.

Parapoynx diminutalis Snellen

A common cosmopolitan species of south-east Asian origin, also found in heated glasshouses for aquatic plants by Agassiz (1978b). It is likely to be imported frequently and may sometimes become established.

P. fluctuosalis (Zell.)

A common cosmopolitan aquatic species, this has only once been found in glasshouses in Britain by Agassiz (1981b).

P. crisonalis (Walker)

Only two specimens of this Indo-Malayan aquatic species have been found in glasshouses in Britain, the first at Enfield by Agassiz (1981b) and another near Cirencester.

Agassiziella angulipennis (Hampson)

For a short time this species was established in heated glasshouses near Enfield (Agassiz, 1978b). Further importation is possible but this species is less likely to become established.

Oligostigma bilinealis Snellen

Two specimens of this far eastern aquatic species have been taken in Britain, but there is no evidence of its becoming established in glasshouses (Agassiz, 1978b).

O. polydectalis (Walker)

This aquatic species originates from Australia and Indonesia and has twice been found in Britain. There is no evidence of its breeding here in glasshouses (Agassiz, 1981b).

Evergestis limbata (L.)

One specimen taken in Guernsey by Peet (1990). Presumably a migrant. A coloured illustration is included in *Br. J. Ent. Nat. Hist.* 1991; 4: Plate II.

Sclerocoma acutellus (Eversm.)

One specimen taken in Hampshire by Sterling (1989), the status of this species in Britain is uncertain. For coloured illustration see *Br. J. Ent. Nat. Hist.* 1990; 3: Plate IV.

Nomophila nearctica Munroe

Pelham-Clinton (1984) detected a specimen of this North-American species in a collection which had been taken in 1991.

Sceliodes laisalis (Walker)

A species of African origin taken in Middlesex 1973, Surrey and Bedfordshire 1983. Possibly a migrant, see Goater (1986).

Endotricha consobrinalis Zell.

A specimen probably reared from imported celery was taken by Goodey (1989).

Sciota adelphella (Fisch. v. Rösl.)

Meyrick (1928) stated that this species had been regarded as British, but only through confusion with *S. hostilis* (Steph.). The first genuine *adelphella* to be recognized was taken by Brotheridge in Wiltshire in 1988, one taken by Dewick in Essex was identified very soon afterwards. Since then several specimens have been noted in collections, chiefly from Kent, but some confusion still remains. See Brotheridge, Corley & Dewick (1988).

Dioryctria schuetzeella Fuchs

First taken in 1980 by Chalmers-Hunt (Chalmers-Hunt & Tweedie, 1982) this species has spread from Kent and Sussex as far as Northants., Cambridge and Berkshire.

Etiella zinckenella (Treits.)

This cosmopolitan pest species is at the northern edge of its range and only occasional migrants can be expected. The first was taken by Dewick at Bradwell-on-Sea, Essex in 1989, a second near Southampton in 1990.

Zophodia grossulariella (Hübn.)

This potential pest was taken by Roche (1984) near Whitstable, Kent in 1982. There is no evidence of its having become established.

Stenoptilia bipunctidactyla group

Pierce & Metcalfe (1938) said 'We think it possible that there may be two species . . .'. Gibeaux (1985, 1987) has assigned those feeding on various foodplants to distinct species, but one cannot believe that nomenclatorial stability has been reached in this complex as yet. Canon Hervey took a series of a *Stenoptilia* species on Ben Lawers, Perthshire, in July 1957 which may be referable to *S. islandicus* (Staud.).

The following species have been added to the British list on the strength of old records from the nineteenth or early twentieth centuries, many of which are unconfirmed: Clepsis trileucana (Doubl.), C. melaleucanus (Walker), Lozotaenia subocellana (Steph.), Foveifera torridana (Led.) = hastana (Hübn.), C. inquinitana (Hübn.), Metaxmeste phrygialis (Hübn.), Herpetogramma centrostrigalis (Steph.), Leucinodes vagans (Tutt), Arenipses sabella Hampson, Selagia argyrella (D. & S.).

The following taxa have at times been cited as species on the British list, but are now regarded as synonyms of closely related species, or in some cases as forms. Eriocrania fimbriata Wals., Stigmella turicella (Herr.-Schäff.), S. basalella (Herr.-Schäff.), S. fulgens (Staint.), S. castanella (Staint.), S. fletcheri (Tutt), S. hodgkinsoni (Staint.), Heliozela stanneella (Ford), Infurcitinea confusella auctt., Argyresthia spiniella Zell., Cataplectica auromaculata (Frey), Depressaria brunneella (Rag.), Agonopterix prostratella (Const.), Paltodora clinosema Meyr., Monochroa morosa (Mühl.), M. quaestionella (Herr.-Schäff.), M. servella sensu Meyr., M. micrometra (Meyr.), Bryotropha portlandicella (Rich.), Syncopacma coronillella auctt., S. cincticulella auctt., Scythris vagabundella (Herr.-Schäff.), Cnephasia octomaculana (Curt.), Rhopobota geminana

(Steph.), Eudonia vafra (Meyr.), Acrobasis sodalella auctt., Ectomyelois phoenicis (Durr.).

The following species were placed on the British list through misidentification and have been or should be deleted: *Micrurapteryx kollariella* (Zell.), *Argyresthia illuminatella* Zell., Coleophora granulatella Zell., *Exapate duratella* Heyd.

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BOOK REVIEW

British sawflies—a key to the adults of genera occurring in Britain, by Adam Wright. An AIDGAP key published by the Field Studies Council 1990, 64 pp. £4.25.—Sawflies have few devotees, even amongst hymenopterists, but this key should enable a wider range of entomologists to take an interest in them. The key covers all of the 12 families and 109 genera of the sawflies, woodwasps and stem borers that comprise the British Symphyta. These contain about 510 species, all with plant-feeding larvae and including some pests of economic importance to fruit growers, foresters and gardeners.